

TOWN OF ERIE

2012 DRINKING WATER

CONSUMER CONFIDENCE REPORT (CCR)

FOR CALENDAR YEAR 2011

If you have any
questions regarding this
report, please contact
Jon Mays, Water &
Wastewater Manager
at 303-926-2895.

We are pleased to present to you the Annual Water Quality Report for the year 2011. This report is designed to provide our water customers with information about the quality water and services the Town of Erie delivers to you daily. Our constant goal is to provide you with a high quality supply of available drinking water at all times. The Town's water operators perform thousands of water tests each year to ensure quality drinking water. The Town staff also monitors drinking water according to federal and state laws for possible contaminants. We are proud that Erie meets and exceeds all federal and state drinking water standards. Erie continues to meet increasingly high water quality standards in a cost-effective manner for the citizens of Erie.



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Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.





DETECTED CONTAMINANTS

Town of Erie routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2011 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

Lead and Copper Sampled in the Distribution System

CONTAMINANT NAME	MONITORING PERIOD	90TH PERCENTILE	NUMBER OF SAMPLES	UNIT OF MEASURE	ACTION LEVEL	SAMPLE SITES ABOVE ACTION LEVEL	TYPICAL SOURCES
COPPER	01/01/2008 to 12/31/2010	0.54	20	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits.
LEAD	01/01/2008 to 12/31/2010	8.7	20	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits.

Disinfection By Products (TTHMs, HAA5, and Chlorite) Sampled in the Distribution System

CONTAMINANT NAME	YEAR	AVERAGE OF INDIVIDUAL SAMPLES	RANGE OF INDIVIDUAL SAMPLES (LOWEST-HIGHEST)	NUMBER OF SAMPLES	UNIT OF MEASURE	MCL	MCLG	MCL VIOLATION?	TYPICAL SOURCES
TOTAL HALOACETIC ACIDS (HAA5)	2011	46.704	21.9 - 59.1	16	ppb	60	N/A	No	By-product of drinking water disinfection.
TTHM	2011	40.412	28.2 - 56.5	16	ppb	80	N/A	No	Byproduct of drinking water disinfection.

Turbidity Sampled at the Entry Point to the Distribution System

CONTAMINANT NAME	SAMPLE DATE	LEVEL FOUND	TT REQUIREMENT	TT VIOLATION?	TYPICAL SOURCES
TURBIDITY	Date: 09/24/2011	Highest single measurement: 0.29 NTU	Maximum 1 NTU for any single measurement	No	Soil Runoff
TURBIDITY	Month: December, 2011	Lowest monthly percentage of samples meeting TT requirement for our technology: 100%	In any month, at least 95% of samples must be less than 0.3 NTU	No	Soil Runoff

Regulated Contaminants Sampled at the Entry Point to the Distribution System

CONTAMINANT NAME	YEAR	AVERAGE OF INDIVIDUAL SAMPLES	RANGE OF INDIVIDUAL SAMPLES (LOWEST-HIGHEST)	NUMBER OF SAMPLES	UNIT OF MEASURE	MCL	MCLG	MCL VIOLATION?	TYPICAL SOURCES
2,4-D	2011	0.068	0 - 0.15	4	ppb	70	70	No	Runoff from herbicide used on row crops.
BARIUM	2008	0.023	0.023 - 0.023	1	ppm	2	2	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
FLUORIDE	2011	0.76	0.76 - 0.76	1	ppm	4	4	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.
NITRATE	2011	0.024	0.024 - 0.024	1	ppm	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
PENTACHLOROPHENOL	2011	0.023	0 - 0.092	4	ppb	1	0	No	Discharge from wood preserving factories.
PICLORAM	2011	0.032	0 - 0.13	4	ppb	500	500	No	Herbicide runoff.

Secondary Contaminants**

CONTAMINANT NAME	YEAR	AVERAGE OF INDIVIDUAL SAMPLES	RANGE OF INDIVIDUAL SAMPLES (LOWEST - HIGHEST)	NUMBER OF SAMPLES	UNIT OF MEASURE	SECONDARY STANDARD
SODIUM	2008	8.1	8.1 - 8.1	1	ppm	N/A

**Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor or color) in drinking water. EPA recommends these standards but does not require water systems to comply.

Violation(s) and Formal Enforcement Action(s)

VIOLATIONS	FORMAL ENFORCEMENT ACTIONS
No Violations to Report	No Formal Enforcement Actions to Report

NOTE: Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section, that means that Town of Erie did not detect any contaminants in the last round of monitoring.



TERMS AND ABBREVIATIONS

Understanding the Detected Contaminants Report

MAXIMUM CONTAMINANT LEVEL GOAL

(MCLG):The 'Goal' is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MAXIMUM CONTAMINANT LEVEL (MCL):

The 'Maximum Allowed' is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

TREATMENT TECHNIQUE (TT):

A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

ACTION LEVEL (AL):

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MAXIMUM RESIDUAL DISINFECTANT LEVEL GOAL (MRDLG):

The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

MAXIMUM RESIDUAL DISINFECTANT LEVEL (MRDL):

The highest level of a disinfectant allowed in drinking water. There is convincing evidence

that addition of a disinfectant is necessary for control of microbial contaminants.

AVERAGE OF INDIVIDUAL SAMPLES

(NO ABBREVIATION):

The typical value. Mathematically it is the sum of values divided by the number of samples.

RANGE OF INDIVIDUAL SAMPLES

(NO ABBREVIATION):

The lowest value to the highest value.

NUMBER OF SAMPLES (NO ABBREVIATION):

The number or count of values.

VARIANCE AND EXEMPTIONS (V/E):

Department permission not to meet an MCL or a treatment technique under certain conditions.

PARTS PER MILLION = MILLIGRAMS PER LITER

(PPM = MG/L):

One part per million corresponds to one minute in two years or a single penny in \$10,000.

PARTS PER BILLION = MICROGRAMS PER LITER (PPB = UG/L):

One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

NEPHELOMETRIC TURBIDITY UNIT (NTU):

Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.



NOT APPLICABLE (N/A):

Does Not Apply.

VIOLATION (NO ABBREVIATION):

A failure to meet a Colorado Primary Drinking Water Regulation.

FORMAL ENFORCEMENT ACTION (NO ABBREVIATION):

An escalated action taken by the State (due to the number and/or severity of violations) to bring a non-compliant water system back into compliance by a certain time, with an enforceable consequence if the schedule is not met.

TREATMENT FACTS

- In 2011, the Town produced 966 million gallons of water.
- The highest usage was 174 million gallons in August.
- The highest daily use was 6.6 million gallons in August.
- Erie has performed over 1,200 water tests at various locations throughout the Town.
- The maximum amount of water that can be produced is 12.2 million gallons per day.

LEAD IN DRINKING WATER

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking.

Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

GENERAL INFORMATION

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791) or by visiting <http://water.epa.gov/drink/contaminants>. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

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The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides**, that may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.
- **Radioactive contaminants**, that can be naturally occurring or be the result of oil and gas production and mining activities.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

OUR WATER SOURCES

The Town of Erie's primary water source is the Colorado-Big Thompson Project (C-BT), which originates on the western slope and is delivered via pipeline from Carter Lake in Berthoud to our Water Treatment Facility in Erie. C-BT water is also delivered via pipeline to our reservoirs for storage in Erie, Prince or Thomas Reservoir. We also fill our reservoirs via the South Boulder Canyon Ditch which originates from Gross Reservoir in Boulder. There are pipelines that carry water from our reservoirs directly to our Water Treatment Facility.



OUR WATER SOURCES

The Colorado Department of Public Health and Environment has provided us with a Source Water Assessment Report for our water supply. You may obtain a copy of the report by visiting <http://www.cdphe.state.co.us/wq/sw/swapreports/swapreports.html>, clicking on Boulder County and selecting **162255; Town of Erie** or by contacting **Jon Mays** at **303-926-2895**. For general information about Source Water Assessment please visit <http://www.cdphe.state.co.us/wq/sw/swaphom.html>.

A summary of all potential sources of contamination for our source waters include: EPA Hazardous Waste Generators, Residential, Urban Recreational Grasses, EPA Chemical Inventory/Storage Sites, Agriculture, Permitted Wastewater Discharge Sites, Forest, Aboveground/Underground and Leaking Storage Tank Sites, Solid Waste Sites, Existing/Abandoned Mine, Septic Systems, Road Miles, Commercial/Industrial/Transportation, Oil/Gas Wells.

The Source Water Assessment Report provides a screening-level evaluation of potential contamination that **could** occur. It **does not** mean that the contamination **has or will** occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan.

Please contact **Jon Mays** at **303-926-2895** to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Consumer Confidence Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.